



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/715,861

11/19/2003

Otto Gosweiler

010564/00081

5610

25223

7590

02/04/2009

WHITEFORD, TAYLOR & PRESTON, LLP

ATTN: GREGORY M STONE

SEVEN SAINT PAUL STREET

BALTIMORE, MD 21202-1626

EXAMINER

PATEL, NIHIR B

ART UNIT

PAPER NUMBER

3772

MAIL DATE

DELIVERY MODE

02/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/715,861	<b>Applicant(s)</b> GOSWEILER, OTTO	
	<b>Examiner</b> NIHIR PATEL	<b>Art Unit</b> 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 26-28, 30-33 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 14-25, 29 and 34-37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on November 14<sup>th</sup>, 2007, with respect to claims 1-42 have been fully considered and are persuasive. The previous rejection(s) of the office action dated July 3<sup>rd</sup>, 2007 has been withdrawn.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **1-10, 26-28, 30-33, 39, 41 and 42** are rejected under 35 U.S.C. 102(b) as being anticipated by Klockseth et al. (US 5,950,621).

4. **As to claim 1**, Klockseth teaches an apparatus that comprises a gas mask **3 (see figure 1; col. 4 lines 1-10)** having a filter port **5 (see figure 1; col. 4 lines 1-15)** used to provide filtered air; a blower **7 (see figure 1; col. 4 lines 15-20)** operatively connected to the filter port of the gas mask, the blower being capable of forcing air to the gas mask; and a detection **11 (see col. 4 lines 15-25)** and control device **16 (see col. 4 lines 25-35)** operatively connected to the blower which detects a pressure condition within the gas mask and controls operation of the blower (**see figures 1 and col. 4 lines 15-67**).

5. **As to claim 2**, Klockseth teaches an apparatus wherein an internal motor **8** operates the blower (**see figure 1; col. 4 lines 15-20**).

Art Unit: 3772

6. **As to claim 3**, Klockseth teaches an apparatus wherein the motor **8** of the blower **7** is driven by a power source **9** (see **figure 1; col. 4 lines 15-25**).
7. **As to claim 4**, Klockseth teaches an apparatus wherein the power source is portable (see **figure 1; col. 4 lines 15-25**).
8. **As to claim 5**, Klockseth teaches an apparatus wherein the power source is one selected from a group consisting of a battery; a solar power pack; and an electrochemical reaction pack (see **col. 4 lines 15-25**).
9. **As to claim 6**, Klockseth teaches an apparatus wherein the power source is connected to a processor (see **figure 1; col. 4 lines 40-50**).
10. **As to claim 7**, Klockseth teaches an apparatus wherein the power source is connected to the processor via a conductive element (see **figure 1; col. 4 lines 40-50**).
11. **As to claim 8**, Klockseth teaches an apparatus wherein the power source and the processor are integrated to form a single unit (see **figure 1; col. 4 lines 40-50**).
12. **As to claim 9**, Klockseth teaches an apparatus wherein the processor and the blower are connected by a coupling (see **figure 1**).
13. **As to claim 10**, Klockseth teaches an apparatus that further comprises a manually adjustable control functionally connected to the processor; wherein the manually adjustable control transmits operational signals to the blower to supplement signals transmitted to the blower by the processor (**inherently the invention must provide a manually adjustable control functionally connected to the processor just in case the processor fails and the user can adjust the blower manually**).

Art Unit: 3772

14. **As to claim 26**, Klockseth teaches an apparatus wherein the detection and control system comprises a pressure sensor **11 (see col. 4 lines 20-25)** positioned inside the gas mask that detects air pressure in the gas mask.

15. **As to claim 27**, Klockseth teaches an apparatus wherein the pressure sensor detects an absolute air pressure inside the mask **(see col. 4 lines 20-25)**.

16. **As to claim 28**, Klockseth teaches an apparatus wherein the pressure sensor detects an air pressure inside the mask relative to an air pressure of ambient air outside the mask **(see col. 4 lines 15-40)**.

17. **As to claim 30**, Klockseth teaches an apparatus wherein pressure sensor is connected to the processor, wherein the processor is connected to the power source, and wherein the power source is connected to the blower **(see figure 1)**.

18. **As to claim 31**, Klockseth teaches an apparatus wherein the pressure sensor detects air pressure in the mask at a high level, and wherein the pressure sensor transmits a signal to the processor to reduce air flow upon detecting the high level of air pressure **(see col. 4 lines 15-40)**.

19. **As to claim 32**, Klockseth teaches an apparatus wherein the processor transmits a signal to the power source to reduce an output of power and to reduce air flow from the blower upon detecting the high level of air pressure **(see col. 4 lines 15-40)**.

20. **As to claim 33**, Klockseth teaches an apparatus wherein the pressure sensor detects air pressure in the mask at a high level, and wherein the pressure sensor transmitting a signal to the processor to terminate air flow from the blower upon detecting the high level of air pressure **(see col. 4 lines 15-40)**.

Art Unit: 3772

21. As to **claim 39**, Klockseth teaches an apparatus that further comprises a filter **6** located at an intake portion of the blower (**see figure 1; col. 4 lines 1-15**)

22. As to **claim 41**, Klockseth teaches an apparatus that comprises a gas mask **3** (**see figure 1; col. 4 lines 1-10**) having a filter port **5** (**see figure 1; col. 4 lines 1-15**) used to provide filtered air; a blower **7** (**see figure 1; col. 4 lines 15-20**) operatively connected to the filter port of the gas mask, the blower being capable of forcing air to the gas mask; wherein the blower is operated by a motor **8** (**see figure 1; col. 4 lines 15-20**) driven by a portable energy source (**see figure 1; col. 4 lines 15-20**); a pressure sensor **11** (**see col. 4 lines 20-25**) disposed in the mask and operatively connected to the blower, wherein the pressure sensor detects an air pressure in the mask and controls an operation of the blower; and a processor **18** connected to the pressure sensor (**see figure 1**) via a first conductive element and connected to the power source via a second conductive element, wherein the processor receives a signal from the pressure sensor to terminate the operation of the blower when air pressure in the mask is at a high level and receives a signal from the pressure sensor to activate the operation of the blower air flow when the air pressure in the mask is at a low level (**see col. 4 lines 15-40**).

23. As to **claim 42**, Klockseth teaches an apparatus that comprises a gas mask **3** (**see figure 1; col. 4 lines 1-10**) having a filter port **5** (**see figure 1; col. 4 lines 1-15**) used to provide filtered air; a blower **7** (**see figure 1; col. 4 lines 15-20**) means for blowing air to the mask; power means **9** (**see figure 1; col. 4 lines 15-20**) for providing power to the blower means; detection means **11** (**see col. 4 lines 20-25**) for detecting a pressure condition in the mask and sending a signal containing pressure condition information to control the blower means (**see col. 4 lines 15-60**); and processing means **18** for processing the pressure condition information signal and

Art Unit: 3772

transmitting the pressure condition information signal to the blower means, wherein the pressure condition information signal instructs termination of the operation of the blower means for blowing when the air pressure in the mask is at a high level and the pressure condition information signal instructs activation of the operation of the blower means for blowing when the air pressure in the mask is at a low level (**see figure 1; col. 4 lines 15-60**).

***Claim Rejections - 35 USC § 103***

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

26. Claims **11-13 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Klockseth et al. (US 5,950,621) in view of Truitt et al. (US 6,622,724).

27. **As to claim 11**, Klockseth substantially discloses the claimed invention; see rejection of claim 1 above, but does not disclose an outflow valve integrated with the mask which releases air within the mask when the outflow valve is in an open position and retains air within the mask

Art Unit: 3772

when the outflow valve is in a closed position. Truitt discloses an apparatus that does provide an outflow valve integrated with the mask which releases air within the mask when the outflow valve is in an open position and retains air within the mask when the outflow valve is in a closed position (**see col. 2 lines 40-60**). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klockseth's invention by providing an outflow valve integrated with the mask which releases air within the mask when the outflow valve is in an open position and retains air within the mask when the outflow valve is in a closed position as taught by Truitt in order to bleed off excess pressure in the face mask.

28. **As to claim 12**, Klockseth substantially discloses the claimed invention; see rejection of claim 1 above, but does not disclose an outflow valve that is in the open position during exhalation. Truitt discloses an apparatus that does provide an outflow valve that is in the open position during exhalation (**see col. 2 lines 40-60**). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klockseth's invention by providing an outflow valve that is in the open position during exhalation as taught by Truitt in order to bleed off excess pressure in the face mask.

29. **As to claim 13**, Klockseth substantially discloses the claimed invention; see rejection of claim 1 above, but does not disclose an outflow valve that is in the closed position during inhalation. Truitt discloses an apparatus that does provide an outflow valve that is in the closed position during inhalation (**see col. 2 lines 40-60**). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klockseth's invention by providing an outflow valve that is in the closed position during inhalation as taught by Truitt in order to prevent fresh gas from escaping.



Art Unit: 3772

30. As to **claim 40**, Klockseth substantially discloses an apparatus that comprises a gas mask **3 (see figure 1; col. 4 lines 1-10)** having a filter port **5 (see figure 1; col. 4 lines 1-15)** used to provide filtered fresh air; a blower **7 (see figure 1; col. 4 lines 15-20)** operatively connected to the filter port of the gas mask, the blower being capable of forcing air to the gas mask, wherein the blower is operated by a motor **8 (see figure 1; col. 4 lines 15-20)** driven by a portable energy source **9 (see figure 1; col. 4 lines 15-20)**; an optoelectric device **11 (see col. 4 lines 20-25)** disposed in the mask at a location suitable for detecting the open position or closed position of the outflow valve and operatively to the blower, wherein the optoelectric detects a pressure condition within the gas mask and controls an operation of the blower; and a processor **18** connected to the optoelectric device via first conductive element and connected to the power source via a second conductive element, wherein the processor receives a signal from the optoelectric device to terminate the operation of the blower when the outflow valve is in a closed position and receives a signal from optoelectric device to activate the operation of the blower air **(see figure 1; col. 4 lines 15-60)** but does not disclose an outflow valve having an open position to release air from the gas mask and a closed position to retain air in the gas mask. Truitt discloses an apparatus that does provide an outflow valve having an open position to release air from the gas mask and a closed position to retain air in the gas mask **(see col. 2 lines 40-60)**. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Klockseth's invention by providing an outflow valve having an open position to release air from the gas mask and a closed position to retain air in the gas mask as taught by Truitt in order to bleed off excess pressure in the face mask during exhalation and to prevent fresh gas from escaping during inhalation.

***Allowable Subject Matter***

31. Claims **14-25, 29 and 34-37** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach an optoelectric device that detects a position of the outflow valve of the mask; a vent to ambient air; which is integrated with the pressure sensor on the mask and is positioned to sense ambient air pressure; or an optoelectric device that is positioned in the mask at a location suitable for detecting the open or closed position of an outflow valve linked to the gas mask, wherein the optoelectric device and the pressure sensor work cooperatively.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIHIR PATEL whose telephone number is (571)272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nihir Patel/  
Examiner, Art Unit 3772

/Patricia Bianco/  
Supervisory Patent Examiner, Art Unit 3772